BEIL INFRASTRUCTURE LIMITED

(formerly known as Bharuch Enviro Infrastructure Limited) Unit - Dahej



Ref: BEIL/DHJ/2025-26/06

Date: 08/05/2025 **PCB ID # 40137**

The Member Secretary Gujarat Pollution Control Board Paryavaran Bhavan, Sector - 10 / A Gandhinagar – 382 010

Dear Sir.

Sub: Environmental Statement for the year 2024-25.

We are forwarding herewith Environmental Statement for our TSDF Facility (Centralized Secured Landfill Facility), Common Incineration plant, Multi Effect Evaporator plant and Drum Decontamination facility situated at BEIL, Plot No D-43 G.I.D.C, Dahej, Ta: Vagra. Dist. Bharuch for the period of the year 2024-25.

We are forwarding a copy of the Manifest regarding collection and disposal of waste from our member industries to GPCB Bharuch on a regular basis. For your reference we have attached here with Borewell results as Annexure 1, Soil result as Annexure 2, Dioxin-Furan result as Annexure 3 and Ambient Air-Stack result as Annexure 4.

We have received the following CTE & CCA Amendment from GPCB during the last year.

- 1. CCA Amendment vide consent no. AH-136911 for Cell 11,12,13.
- 2. CCA Amendment vide consent no. AH-139683 for Pre-processing Facility.
- 3 CTE Amendment vide consent no. CTE-139612 for Capacity enhancement of secured landfill facility.
- 4. CTE Amendment vide consent no. CTE-142041 for Common spray dryer.

Also, we would like to bring your kind attention that our laboratory has been accredited by NABL & approved by MoEF&CC. We also have implemented ISO 14001:2015 & ISO 45001:2018 certification for Environmental Management system and Occupational Health and safety standards.

We hope that the above is in order.

Thanking you Yours faithfully

For, BEIL Infrastructure Ltd

Authorized Signatory

Regional Office

Gujarat Pollution Control Board, Bh

2. Unit Head- Hazardous waste cell Gujarat Pollution Control Board, Ga RI DAHEJ SO (392130)

RG480632747IN IVR:8271480632747 Counter No:2,13/05/2025,11:56 To: UNIT HEAD HAZARDOUS WASTE CELL PIN:382010, Gandhinagar Gujarat HO From: BEIL INFRAS, DAHEJ

Wt:140gms Ack Fee:3.00,REG=17.0 Amt:64.90, Tax:9.90, Amt. Paid:65.00(Cash) (Track on www.indiapost.gov.in)

RG480632870IN IVR:8271480632870 RL DAHEJ SO (392130) Counter No:2,13/05/2025.11:56 TO: THE MEMBER SECRETARY G P C B PIN:382010, Gandhinagar Gujarat HO From: BEIL INFRAS, DAHEJ Wt:140ams Ack Fee:3.00.REG=17.0 Amt:64.90.Tax:9.90.Amt.Paid:65.00(Cash) (Track on www.indiapost.gov.in) (Dial 18002666868)(Wear mask -Stay safe)

Post Received

Guarat Pollution Control Board BHARUCH

CIN NO. U45300GJ1997PLC032696

Works Office: Plot No. D-43, Dahej Amod Road Phone: (02641) 291129, E-mail: mistryrg@beil (Track on www.indiapost.gov.in)

Regd. Office: Plot No. 9701-16, GIDC Estate (Dial 18002666868) (Wear mask -Stay safe) Phones (02646) 253135, 225228 Fax: (02642)

ENVIRONMENTAL STATEMENT

Environmental Statement for the financial year ending 31^{st} March 2025 PART - A

	Name and address of the owner/occupier of the industry/operation or process			Director – Mr. Ashok Panjwani Operator – Mr. B.D. Dalwadi		
01					BEIL Infrastructure Ltd	
				12	Plot # D-43, GIDC, Dahej, Ta: Vagra	
	•			7.3	Dist : Bharuch	
02	Industry Category	Primar	y – STC Code		-	
		Second	lary-SIC Code			
03	Production capacity	·			Units	
		N	Product		Capacity	
	*	0.				
		1.	Secured land site		1,65,400 MT Cell-1 (Closed) 3,12,960 MT Cell 2& 5 (Partially Closed) 1,65,689 MT Cell-3 (Capacity reach) 1,75,385 MT Cell-4 (Capacity reach) 2,61,312 MT Cell-6 (Capacity reach) 1,19,468 MT Cell-7 (Capacity reach) 1,05,942 MT Cell-8 (Operation) 94,708 MT Cell-9 (Operation) 1,29,815 MT Cell-10 (Operation) 76,369 MT Cell-11 (Operation) 1,88,948 MT Cell-12 (Operation) 1,04,004 MT Cell-13 (Operation)	
		2.	Multiple Eff		200 KLD	
		3.	Evaporator (M De-Contamin & De-toxifi packing mate (drum, carbo liners etc.)	ated ed erial by,	2,10,240 Nos/Year	
E		4.	De-contamina & Detoxifica of tankers	ated tion	36,000 Nos/Yr	
		5.	Incineratio Facility	n	12 Million Kcal/Hr	
		6.	Pre-Processi Facility		Waste mix Liquid – 22,930 MTPA Waste mix Solid – 3566 MTPA	
			It is a TSDF	Facili	ty (Common Secured Landfill Facility)	

04	Year of establishment		2015	
05	Date of the last Environmenta	Statement submitted	29.05.2024	

PART - B

Water and Raw material Consumption

01. Water consumption m³/day

01		Water Cons	sumption	171.81	m ³ /day
02		Proce	ess	22.95 1	m ³ /day
03		Dome	stic	23.83 r	m³/day
04		Biodegra	adable	125.03	m ³ /day
Sr. No.	Sr. Actual Oty, during During the pr		Process Water Cons product		
				During the previous financial year	During the current financial year
	1.	Secured landfill site	3,48,918.355 MT (received)	Note: There is no manufacturing activity as this is TSDF Facility	
	2.	MEE	39,705.86 MT (Evaporated)		
a	3.	De-Contaminated & Disposal system	82,396 Nos.		
	4.	De-contaminated & Detoxification of tankers			
	5.	Incineration	13,547.155 MT (Incinerated)		
	6. Pre-processing Facility Fac				

^(*) Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw material used.

02 Raw Material Consumption

Sr. No.	Name of Products (*)	Consumption of raw material (in Kgs)				
		During the previous financial year	During the current financial year			
1.	(Common secured Landfill Facility & Common Incinerator Facility)	Fly Ash: 47,84,900 KG Cement: 19,63,900 KG Lime: 25,95,980.000 KG Caustic: 17,76,209.550 KG Activated carbon: 10,056 KG	Fly Ash: 11,53,730 KG Cement: 4,46,630 KG Lime: 19,08,903 KG Caustic: 16,32,021 KG Activated carbon: 12,042 KG			

PART - C Pollution discharged to environment/unit of output (Parameters as specified in the Consent issued)

Sr. No.	Pollution		pollutant Mass/day	ts discharged y)		Concentrations of llutants in discharges (mass / volume)	Percentage of variation from prescribed Standards with reasons
A	Water	BEIL, Dahe MEE conderpremises.	ej is a ZLD unit, the leachate generated is being ensate is treated in ETP (MAP+ RO). The perme		ate generated is being AP+ RO). The perme	treated in MEE and	
		Incinerator	stack				
		PM		35.73 Kg/d	lay	26.02 mg/m3	-47.97%
		HCl		4.43 Kg/da	ay	3.22 mg/m3	-93.56%
		SO2		1.61 Kg/da	ıy	99.41 mg/m3	-99.41%
		NOx (NO		10.69 Kg/d	ay	7.78 mg/m3	-98.05%
		СО	u u	16.22 Kg/d	ay	11.81 mg/m3	-88.19%
В	Air	PM SO2 NOx	24.50	Kg/day kg/day Kg/day		33.01 mg/m ³ 1.50 mg/nm ³ 21.30 mg/m ³	-77.99% -98.50 % -57.40%
		Stabilization	ı scrubbe	er stack			
, * B		PM	9.86	Kg/day		15.45 mg/m ³	-89.70%
a a		HCL		-		Not detectable	-
	*Detection Limit: PM: 10 mg/Nm3, HCl: 0.2 mg/Nm3, Cl ₂ : 0.2 mg/Nm3					mg/Nm3	
Drum Decontamination scrubber stack:							
		PM	14.41 Kg	g/day	8.28	mg/m ³	-94.48%
v				below detection			
	L					nit. 2 :0.2 mg/Nm3	

<u>Part – D</u> <u>Hazardous Waste</u>

(As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.)

Ha	zardous Wastes	Total Qua	ntity (MT)
,		During the previous financial year 2023-24	During the current financial year 2024-25
Α	From Process	(*)	(*)
A	Prom Process	5171.32 MT MEE salt & ETP	(*) 5267.73 MT MEE salt & ETP Sludge.
		generated from landfilling was treated	22318.18 KL of leachate water generated from landfilling treated in the MEE plant.
	From pollution	from MEE and treated in the ETP	18,922 KL Condensate generated from MEE and treated in the ETP plant.
	-	2.740 MT Residue was generated from the drum-decontamination plant.	0.03 MT Residue generated from the drum- decontamination plant.
		0.085 KLPA Used Oil generated.	0.076 KLPA Used Oil generated.
			2174.970 MT Qty Ash generated from the Combustion chamber & WHRB.
			9078.326 MT from Lime ash generated from incineration plant.
	Quantity re-cycled	and reused in gardening and other	18,836 KL RO Permeate generated and reused in gardening and other industrial activities.
В		treatment (stabilization) of Landfill	generated from incinerator used for
	Total quantity disposed of for landfill	Received- 3,64,852.72 MT Disposed- 3,55,733.66 MT	Received- 3,48,918.355 MT Disposed-3,56,697.115 MT

	Total quantity incinerated	15,352.56 MT	13,547.155 MT
(*)	permitted by GPCB,	Facility (Common Secured Landfill Fa are collected from member industries ease see the attached Table for quantit	, and disposed at the landfill site as per

Part – E Solid Waste

	Hazardous Wastes	Total Quantity (MT)				
		During the previous financial year 2023-24	During the current financial year 2024-25			
a	From Process	(*)	(*)			
b	From pollution control facilities (MEE salt & ETP Sludge)					
(*)	This being a TSDF Facility (Commo	on Secured Landfill Facilit	ty), different types of wastes			

(*) This being a TSDF Facility (Common Secured Landfill Facility), different types of wastes permitted by GPCB, are collected from member industries, and disposed at the landfill site as per CPCB guideline. Please see the attached Table for quantity disposed at the site.

Part - F

Please specify the characteristics (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

BEIL is receiving accepted types of waste for secured landfilling. If waste is not meeting criteria for direct landfilling, necessary treatment like neutralization / stabilization etc. are given. Leachate generated is treated at in-house MEE followed by Spray Dryer.

Part - G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

The Company has implemented Environmental Management System Standards ISO 14001:2015 & ISO 45001:2018 and helped in improving overall environmental condition and safety of the unit.

This being a TSDF Facility (Common Secured Landfill Facility), & Common Incinerator Facility), there is also a pre-processing facility. We are collecting solid / hazardous wastes from our members and treating & disposing off. We are drawing samples from every truck coming to our site and a Quick Analysis is done for pH, Moisture Content and Organic Content, Paint Filter Liquid Test etc. Also, we are verifying whether waste is uniform and is not having any obnoxious smell. Also, detailed analysis of solid / hazardous waste samples is done at the laboratory. During monsoon period, the site is kept covered. We have also provided a storage facility for keeping the solid / hazardous wastes collected during monsoon. Leachate generated from the landfill is treated in in-house MEE at BEIL Dahej.

Landfill Site (Cell-I): - Capped

Landfill Site (Cell II & V): - Partially capped

Landfill Site (Cell III & Cell IV): - Capacity Reach

Landfill Site (Cell VI): - Capacity Reach

Landfill Site (Cell VII): - Capacity Reach

Landfill Site (Cell VIII): - Operational

Landfill Site (Cell IX): - Operational

Landfill Site (Cell X): - Operational

Landfill Site (Cell XI): - Operational

Landfill Site (Cell XII): - Operational

Landfill Site (Cell XIII): - Operational

BEIL has installed multiple effect evaporation system (MEE), which is energy efficient compared to other evaporation system. We have Received CCA on 16.12.2017 and it is in operation.

BEIL Infrastructure Limited have installed one incinerator with a capacity of 12 million K cal/Hr along with Heat recovery system. Generated steam is being utilized in the Multi Effect Evaporation system (MEE) and paddle dryer system for the drying of sludge purpose. The system provided consists of Rotary kiln, Secondary Combustion Chamber, WHRB, Spray dryer adsorber (SDA), Bag Filter, Wet Scrubber, Demister, ID Fan, Chimney & Continuous Monitoring System.

We have installed solar panels above capped portion of landfill. We have generated 2,15,158 kWh unit during the year 2024-25.

Part - H

Addition measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution.

- GPCB XGN Online manifest system implemented for all industries.
- The Laboratory at BEIL is NABL accredited.
- BEIL is also going for recognition of MoEF for Laboratory.
- Total investment for environmental protection including abatement of pollution, prevention of pollution is rupees 94,54,028.74 during the year 2024-2025. Details are as following:
 - ✓ Tarpaulin covering with LDPE sheet.
 - ✓ In Bag House of MEE plant damaged Begs had been replaced.
 - ✓ Installation and maintenance work related to CEMS.

Part - I

Any other particulars for improving the quality of the environment.

- BEIL has implemented Environmental Management System Standards ISO 14001:2015 & ISO 45001:2018. Implementation of ISO 14001:2015 & ISO 45001:2018 has helped in improvement of the environmental protection and Safety.
- The design of secured landfill is done under the guidance of IIT, New Delhi. After construction of each cell, inspection is done by Professor from IITD.
- Lot of NGOs, community members, journalists, students, and industrialists are visiting BEIL and appreciating the operations. BEIL is exhibiting various details in front of the landfill. All the visitors are welcome.
- BEIL is maintaining a proper Manifest system as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. This helps with keeping proper records.
- The laboratory has been augmented. Laboratory got recognition of NABL.
- A green belt is developed around the periphery.
- We have installed solar panels above capped portion of landfill. We have generated 2,15,158 kWh unit during the year 2024-25.

For, BEIL Infrastructure Limited, Dahei

Authorized Signatory

ANNEXURE-I

Production during the year 2024-25 (Product Wise)

Sr. No.	Product	Consented Qty.	Actual Qty. during the year 2024-25			
1	Secured Land Fill Site	19,00,000 MT	3,48,918.355 MT (Received)			
2	Multi Effective Evaporator	200 KLD	39,705.86 MT (Treated)			
3	Decontamination & Detoxify Facility (Drums/Barrels/Carboy)	2,10,240 Nos/Year	82,396 Nos.			
4	De-contaminated & De-toxified Tanker	3000 Nos./Month	<u></u>			
5	Common Incineration Facility along With Waste Heat Recovery System	12 Million Kcal/Hour	13,547.155 MT (Incinerated)			
6	Pre-processing facility	Mix solid waste- 3566 MT Mix liquid waste- 22930 MT	503.12 MT (sent to Cement industries for co-process)			

ANNEXURE – 3

WASTE GENERATION DETAILS

Cat.:35.3- MEE Salts & ETP Sludge from wastewater treatment (MEE plant)

Month	Generation of MEE Salts (MT)	Generation of chemical Sludge (MT)
April- 2024	358.280	13.770
May- 2024	364.700	13.560
June -2024	374.130	8.400
July -2024	334.650	13.380
August -2024	448.680	3.920
September -2024	163.100	6.760
October -2024	581.670	4.660
November-2024	652.850	11.620
December -2024	510.400	5.520
January- 2025	431.030	6.010
February- 2025	394.990	7.810
March – 2025	547.720	10.120
Total	5,162.20	105.530

ANNEXURE – 4

WASTE GENERATION DETAILS

Cat.:37.2- Ash from incinerator

Month	Generation				
	Burnt Ash (MT)	Lime Ash (MT)	WHRB Ash		
April- 2024	145.820	728.850	8.52		
May- 2024	103.710	1093.430	6.58		
June -2024	156.970	349.600	7.210		
July -2024	141.450	731.120	0		
August -2024	124.450	827.990	0		
September -2024	110.890	1055.670	0		
October -2024	120.150	614.860	0		
November-2024	177.030	362.340	0		
December -2024	290.700	967.650	0		
January- 2025	318.770	941.446	0		
February- 2025	167.450	683.270	0 1		
March – 2025	317.580	722.100	0		
Total	2174.970	9078.326	22.31		

<u>Note:</u> Generated Ash is disposed of immediately in the Common Secured Landfill Facility after checking its quality as per the acceptance criteria and there is no storage facility. Lime ash is used for the stabilization of Landfill waste.

$\underline{ANNEXURE - 5}$

WASTE GENERATION DETAILS

Cat.: 5.1- Used / Spent Oil

Month	Opening stock	Generation	Disposed	Closing Stock
			1	All quantity in litres
April- 2024	110	5	0	115
May- 2024	115	0	0	115
June -2024	115	5	0	120
July -2024	120	0	0	120
August -2024	120	10	0	130
September -2024	130	5	0	135
October -2024	135	6	0	141
November-2024	141	10	0	151
December -2024	151	5	0	156
January- 2025	156	10	0	166
February- 2025	166	10	0	176
March – 2025	176	10	0	186
Total		76	0	

ANNEXURE-6

LANDFILLING DETAILS

QUANTITY OF SOLID / HAZARDOUS WASTE RECEIVED AND DISPOSED OFF DURING APRIL- 2024 TO MARCH – 2025

Sr No	Month	Quantity Received (MT)	Quantity Disposed (MT)
1	April- 2024	40358.766	49477.826
2	May- 2024	46438.570	46438.570
3	June -2024	28413.354	18555.049
4	July -2024	10531.420	0
5	August -2024	15708.455	0
6	September -2024	11242.120	0
7	October -2024	17398.365	17398.365
8	November-2024	34737.795	42737.795
9	December -2024	42011.725	56011.725
10	January- 2025	43898.239	54898.239
11	February- 2025	30692.745	37192.745
12	March – 2025	27486.801	33986.801
TOTAL		3,48,918.355	3,56,697.115

INCINERATION DETAILS

QUANTITY OF INCINERABLE WASTE RECEIVED AND DISPOSED OFF DURING APRIL- 2024 TO MARCH- 2025

Month	Waste Received (MT)	Waste Incinerated (MT)
April- 2024	999.513	1466.339
May- 2024	1203.756	1265.19
June -2024 •	931.225	924.854
July -2024	738.32	1387.116
August -2024	916.37	1003.704
September -2024	1095.166	1123.866
October -2024	1759.055	747.538
November-2024	1392.26	759.297
December -2024	1572.400	1127.136
January- 2025	1576.347	1613.436
February- 2025	2098.885	669.681
March – 2025	1571.735	1458.998
Total	15855.032	13547.155

INCINERATION DETAILS

QUANTITY OF INCINERABLE WASTE RECEIVED, TREATED AND DISPOSED OFF DURING APRIL- 2024 TO MARCH- 2025

Opening Stock:1623.080 MT

							*					
Month			Waste I	Waste Received (MT)		ų			Waste Incinerated (MT)	inerated		
	AQUEOUS	High CV	SEMI	SOLID	TARRY	TOTAL	AQUEOUS	High CV	SEMI SOLID	SOLID	TARRY	TOTAL
April- 2024	187.400	492.305	174.135	145.673	0	999.513	348.127	577.665	337.261	203.286	0	1466.33
May- 2024	98.675	625.820	265.641	213.620	0	1203.756	347.724	609.49	166.616	141.36	0	1265.19
June -2024	28.860	429.445	103.615	369.305	0	931.225	70.503	429.041	187.901	237.409	0	924.854
July -2024	28.990	311.840	181.575	215.915	0	738.32	136.944	656.827	167.261	426.084	0	1387.116
August -2024	77.385	458.930	192.635	187.420	0	916.37	75.648	570.166	150.200	207.69	0	1003.704
September -2024	42.020	518.915	154.940	379.291	0	1095.166	64.374	511.967	220.347	327.178	0	1123.866
October -2024	237.225	599.045	324.445	566.970	31.370	1759.055	113.108	383.328	64.756	183.442	2.904	747.538
November-2024	140.885	232.710	494.120	484.455	40.090	1392.26	180.82	263.317	165.581	128.223	21.356	759.297
December -2024	184.147	234.552	387.630	715.131	50.940	1572.400	237.356	293.582	207.19	379.224	9.784	1127.136
January- 2025	213.535	255.510	328.499	764.963	13.840	1576.347	236.838	123.753	358.484	686.728	36.372	1613.436
February- 2025	798.280	415.020	334.200	551.385	0	2098.885	141.317	74.123	182.455	265.704	6.082	189.699
March - 2025	231.165	383.875	401.780	548.235	089.9	1571.735	368.465	335.559	193.507	553.354	8.113	1458.998
Total	2268.567	4957.967	3343.215	5142.363	142.920	15855.032	2321.224	4828.818	2401.559	3910.943	84.611	13547.155
			•									

Note: - Total 503.12 MT waste sent for co-processing, closing stock as on (31.03.2025): 3427.837 MT

ANNEXURE - 7 WASTE GENERATION AND DISPOSED DETAILS (Pre-Processing)

Month	Opening stock	Pre-processing	Dispatch Qty.	Closing Stock
			Al	l quantity in MT
April- 2024	0.000	0	0	0.000
May- 2024	0.000	0	0	0.000
June -2024	0.000	0	0	0.000
July -2024	0.000	0	0	0.000
August -2024	0.000	0	0	0.000
September -2024	0.000	0	0	0.000
October -2024	0.000	0	0	0.000
November-2024	0.000	0	0	0.000
December -2024	0.000	0	0	0.000
January- 2025	0.000	0	0	0.000
February- 2025	0.000	74.81	74.81	0.000
March – 2025	0.000	428.31	428.31	0.000
Tótal ·	0	503.12	503.12	0

Note: - Waste sent for co-processing at

- 1. M/s JK Cement Works, Mangrol, Nimbharia, Rajasthan.
- 2. M/s JK Cement Works, Kailashnagar, Nimbharia, Rajasthan.
- 3. M/s Dalmia cement Bharat Limited, Rajagangapur, Odisha,
- 4. M/s Wonder Cement Limited, Chittorgarh, Rajasthan